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Article

Gender Differences in the Mitigating Effect of Co-Parenting on Parental Burnout: The Gender Dimension Applied to COVID-19 Restrictions and Parental Burnout Levels

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Abstract: Parenting is recognized as a complex and stressful activity, which in recent years has been linked to the potential development of parental burnout among mothers and fathers. With the spread of COVID-19 around the globe, not only have situations of health emergency and economic difficulty emerged, but also tremendous impacts on individual lives and family role divisions, which continue to be experienced today. As lockdown measures have affected unemployment rates, financial insecurity levels, social support, amount of leisure time, and the number of caring responsibilities, parents are expected to be at higher risk for developing parental burnout. Co-parenting is presented as a factor which can mitigate the effect between COVID-19 lockdown measures and the levels of experienced parental burnout. Nevertheless, we argue that the role of co-parenting in association with the implications of COVID-19 on parental stress differs between men and women. As parenthood remains an activity that is largely gender-based, co-parenting is hypothesized to be of more crucial importance in attenuating the effect between COVID-19 lockdown measures and parental burnout for fathers in comparison to mothers. Our results confirm previous findings that COVID-19 has increased levels of parental burnout. The relationship between state-imposed COVID-19 lockdown measures and levels of parental burnout was not found to be significantly affected by co-parenting. However, when assessing this two-way interaction separately for men and women, we saw that this mitigating effect was significant for fathers and non-significant for mothers.

Keywords: parental burnout; co-parenting; COVID-19; gender

1. Introduction

The spread of COVID-19 around the globe has not only led to situations of health emergency and economic difficulties, but has also had tremendous implications for individuals' personal lives and family role divisions. State-implemented measures were taken to combat the spread of the virus, known as the various forms of "lockdown" with implications for public events, (social) gatherings, restrictions on movement and travelling, and the closing of workplaces, schools, and day-care facilities. Even though these changes are essential in the battle against COVID-19, people's daily lives have been drastically impacted. Negative consequences such as an increase in stress, physical and mental health risks, isolation and loneliness, economic vulnerability and job losses have been found to be associated with the lockdown measures around the world (Bradbury-Jones and Isham 2020; Griffith 2020). However, little is known about the effect of co-parenting on parenting and parental burnout in particular. Since children and their parents became increasingly homebound as the virus spread, the virus also affected parenting practices and increased parental stress (Griffith 2020). Parenting in itself has been recognized as both a complex and particularly stressful activity (Abidin 1990; Deater-Deckard 2014). Earlier research showed how the division between family responsibilities and paid work can increase role overload and stress for both men and women. Increased difficulty to combine work and family has

been associated with lower levels of parental functioning (Belsky 1984; Deater-Deckard and Scarr 1996). In a world without the existence of a pandemic, 5 to 20 percent of parents experience stress related to their role as a parent, with this stress sometimes leading to parental burnout. Parental burnout is defined as ‘a state of intense exhaustion related to one’s parental role, in which one becomes emotionally detached from one’s children and doubtful of one’s capacity to be a good parent’ (Mikolajczak et al. 2019, p. 3; Roskam et al. 2017). Moreover, parental burnout can, in some cases, lead parents to become neglectful or violent towards their children (Mikolajczak et al. 2019). Factors associated with an increased risk for parental burnout are, among others, having a child with special needs such as a chronic illness or disability, a lack of parental stable traits, and factors associated with family functioning, including: low marital satisfaction, a lack of co-parenting practices, and family disorganization (Norberg and Green 2007; Basaran et al. 2013; Mikolajczak et al. 2017). In addition, factors that are associated with higher risks of parental burnout, and which the COVID-19 put pressure on, are parental unemployment, financial insecurity, low levels of social support from family and friends, and a lack of leisure time (Griffith 2020; Mikolajczak et al. 2017). The COVID-19 pandemic has put a lot of pressure on specifically those latter factors, and therefore, parents might be at higher risk for developing parental burnout during times of crisis.

However, the implications of increased caring responsibilities have previously been found to differ between men and women. Parenthood remains a social role which is gender-based (Koivunen et al. 2009; Nentwich 2008). As research indicates, women are still more often found to be carrying the responsibilities for care, and have more basic household duties. Research by Alon et al. (2020) showed that, during the COVID-19 crisis, they were found to be more heavily affected by the closure of child-care facilities and schools. This was found not only to be the case in households where the male was the breadwinner, but also in dual-earner households (Alon et al. 2020). During the COVID-19 pandemic, women found themselves juggling work and caring and household responsibilities, while the man’s job came first. This specifies a widened gap of gender inequality with regard to family responsibilities during the COVID-19 pandemic (Ferguson 2020), and a possible backlash of previously made progress regarding more egalitarian role divisions. Consequently, mothers are still seen as the primary parent, and for fathers the role as breadwinner remains dominant (Nentwich 2008; Renk et al. 2003; Roskam and Mikolajczak 2020). Since co-parenting is one of the factors that influences parental burnout levels (Roskam et al. 2017), this paper will examine the extent to which co-parenting has a mitigating effect on the association between state-imposed lockdown measures and parental burnout levels, and how this effect might be different between men and women.

1.1. COVID-19 and Parental Burnout

The COVID-19 pandemic forced us to encounter an unprecedented situation in which parents have to juggle family and work as state-implemented restrictions increased caring responsibilities for parents, while working from home. Parental burnout significantly increased during the COVID-19 pandemic (van Bakel et al. forthcoming; Griffith 2020). State-imposed lockdown measures, which limit social contact and increase pressure on parents, in turn place parents at higher risk for parental burnout symptoms. Factors that were found to affect parental burnout rates include the number of days respondents were locked down, whether or not they had to home school their children, and the amount of attention the child required from them during the day. Based on these theories, we hypothesise that:

Hypothesis 1. *The stricter the lockdown measures imposed by the government, the higher the level of parental burnout.*

1.2. Gender Differences in Parental Burnout: The Role of Co-Parenting

Parental burnout has been described as resulting from a chronic imbalance of demands over resources (Mikolajczak et al. 2019). Particularly, parental burnout is therefore a result of more demands than resources. Examples of factors that affect parental burnout are levels of parental perfectionism, emotional intelligence, type of childrearing practices, and support received from a co-parent. High levels of parental perfectionism, low levels of emotional intelligence, negative childrearing practices, and lacking support from a co-parent are associated with increased levels of parental burnout. These factors work in exactly the opposite way when they reflect resources rather than demands (Mikolajczak et al. 2017).

Although time spent with children in direct interactions is more equally distributed between men and women nowadays, mothers take more responsibility with regard to homework, disciplining, and both fun and care activities (Renk et al. 2003). With women as the primary parent, we would expect them to be more prone to experience parental burnout. While some preliminary evidence has been found that supports this association (Roskam et al. 2018), other research indicates that the rates of mothers and fathers affected by parental burnout are equal (Mikolajczak et al. 2017).

Having a co-parent can reduce parental stress in cases when this individual agrees with one's goals and practices, takes an active role in decision-making processes in parenting, and values one as a parent (Durtshi et al. 2017; Mikolajczak et al. 2017). Especially in times in which parental stress increases and levels of parental burnout are higher than before, it is important to understand the role of couples' co-parenting as a way to reduce the effects of the COVID-19 lockdown measures on parental burnout. Studies show that co-parenting is efficient and effective when one wants to improve the family system, and reduces the level of stress among parents (Delvecchio et al. 2015). In this line of reasoning, we hypothesize that:

Hypothesis 2. *A higher level of co-parenting mitigates the effect of the COVID-19 lockdown measures on parental burnout.*

Based on theories on social roles (Eagly and Wood 2012) and social learning (Bandura 1977), gender norms can explain differences in escape ideation and maltreatment behaviours between burned-out fathers and mothers. Mothers remain the primary caregiver from a normative point of view and are expected to be available to their children. In addition, children are more likely to seek for their mother's help rather than their father's help in the case of both practical and emotional support. As a consequence, mothers are expected to be less likely to withdraw from their parental role in comparison to fathers (Roskam and Mikolajczak 2020). In addition, as part of a two-fold gender revolution, it is indicated that the involvement of men in caring and other household responsibilities is often delayed. Women's emancipation in the public sphere has had a longer time to develop up to today, in comparison to men's emancipation in private spheres. Therefore, men are less likely to be used to carrying responsibility over care for their children in comparison to women (Goldscheider et al. 2015). Drawing from this line of reasoning, we hypothesize that:

Hypothesis 3. *The co-parenting role is a more crucial factor for fathers than for mothers.*

2. Data and Methods

For the present study, we used data that were collected through the International Investigation of Parental Burnout (IIPB) Consortium in twenty-five countries around the world during the COVID-19 pandemic. The names of the consortium members that have contributed to the data collection are listed at the end of this paper. In each country, researchers of the IIPB were asked to recruit a minimum of 200 parents, by varying recruitment procedures (e.g., social media networks, newspaper advertisement, word of mouth,

and door-to-door) and the survey was completed either on paper or online. Parents were eligible to participate in the study if they had at least one child, regardless of their age, still living at home.

The respondents for this present research were only those that are part of a two-parent family, and the respondents that answered the questions regarding co-parenting. Burundi was not included in this study because of their outlier value for the parental-burnout scale, we need more information on possible reasons for this outlier, which is why we deleted it from the sample for the time being. In addition, for Iran, Italy, Portugal and South Korea, the questions with regard to co-parenting were not included in the questionnaire, which leaves us with data for a remainder of twenty-one countries. The final sample included 4587 parents (of which 74.2% mothers and 25.8% fathers). The dataset includes data from the following countries: Belgium (13.5%); Cameroon (3.1%); Finland (11.0%); France (3.7%); Japan (2.6%); Peru (4.9%); Poland (3.0%); the Netherlands (4.2%); Turkey (4.6%); Chicago (3.5%); Vietnam (2.9%); Czech Republic (1.9%); Egypt (2.5%); Israel (0.4%); New Zealand (0.5%); China (10.1%); Chili (10.6%); Colombia (3.2%); Lithuania (2.9%); Greece (6.5%), and Uruguay (4.2%).

2.1. Parental Burnout

For our dependent variable, parental burnout, we used the Parental Burnout Assessment scale (PBA [Roskam et al. 2018](#)). The PBA questionnaire assess four core symptoms of parental burnout: emotional exhaustion; contrast with previous parental self; loss of pleasure in one's parental role; and emotional distancing from one's children. All questions were answered by using a 7-point frequency scale from 0 (never) to 6 (every day). In the dataset, the sum score of parental burnout was already present, with possible scores ranging from 0 to 138, which we used for our analysis. A reliability test of the PBA scale, based upon the 23 individual items, resulted in a Cronbach's alpha of 0.967 in our sample. This indicates the scale to be a reliable measure of parental burnout levels among parents.

2.2. Governmental Lockdown Measures

Governments are taking a range of measures in response to the COVID-19 outbreak. The Oxford COVID-19 Government Response Tracker (OxCGRT) collected daily scores for each country. The OxCGRT collects publicly available information on 19 indicators of government responses on policy indicators, economic policies and health system policies. Those measures are concerned with, among other things, school closing, workplace closure, restrictions on gatherings, income support to citizens, testing regime, and vaccination policies. We computed a measure of COVID-19 lockdown restrictions by allocating one score on the stringency index to each country, by calculating the average score on this index during the period of data collection in that specific country.

2.3. Co-Parenting

The Co-parenting Inventory for Parents and Adolescents (CI-PA) by [Teubert and Pinquart \(2011\)](#) created a measure of co-parenting consisting of cooperation, conflict, and triangulation as dimensions of co-parenting. To assess co-parenting, we used the subscale co-parental cooperation. The variable co-parental cooperation consists of four questions evaluating both parents' investment in the child; reciprocal involvement with the child; respect for each other's judgment about child rearing; and desire to communicate child-related information ([Teubert and Pinquart 2011](#)). All four questions were answered by using a 5-point frequency scale ranging from 1 (completely false) to 5 (completely true). For our analysis, we used the sum score of co-parental cooperation with possible scores ranging from 4 to 32. A reliability test of the co-parenting scale, based upon the four individual items, resulted in a Cronbach's alpha of 0.857 in our sample. This indicates the scale to be a reliable measure of co-parenting practices among parents.

2.4. Gender

The aim of this research was to see if there is a mitigating effect of co-parenting on the effect of COVID-19 on parental burnout and to see whether this differs for men and women. In our analysis, we controlled for gender, and ran model 2 and model 3 separately for fathers and mothers. Respondents were asked to answer the following question: Are you a . . . ? With answering options father and mother. In our analysis, a value of 0 was assigned to mothers, and a value of 1 to fathers. The distribution of fathers and mothers in the sample was 74.2% mothers and 25.8% fathers.

2.5. Covariates

Apart from gender, we controlled for educational level and number of children in our analysis. With regard to educational level, respondents were asked to answer the question 'What is your level of education? (Number of successfully completed school years from the age of 6; e.g., 5; just write the number)'. For the variable number of children, respondents were asked to answer the question 'How many children live in your household (your biological children, adoptive/foster and/or children of your partner in case of a step-family and/or children of relatives in case of a multigenerational family and/or children of your spouse's other partners in case of polygamy)? (e.g., 5; just write the number)'.

2.6. Analytical Strategy

First, we assume that the governmental lockdown measures related to COVID-19 increased the level of parental burnout among parents. In order to test this relationship, we performed a linear regression. We checked whether this expected relationship was present, and controlled for educational level and number of children, since they are believed to have an effect on parental burnout as well (Roskam 2021). Before we performed the linear regression analysis, we checked our data for the linear regression assumptions and concluded that our data meets the assumptions for linear regression analyses. Moreover, to test our second hypothesis, in which we expect co-parenting to mitigate the effect of COVID-19 lockdown measures on parental burnout, we computed an interaction effect of the stringency index with co-parenting. We performed a linear regression analysis in which we included all variables and the interaction. Third, we expect that the mitigating effect of co-parenting depends on gender. In order to test this, we ran the linear regression analysis with interaction separately for men and for women.

3. Results

Table 1 shows the descriptive statistics for the variables of interest. For the total sample, the mean age of the respondents was 40 (S.D. = 8.2), the mean years of education was 15.9 (S.D. = 4.2), and the average number of children in the household was 1.9 (S.D. = 1.1). We used the stringency index (based on the Stringency Index of the Oxford COVID-19 Government Response Tracker (OxCGRT)) as a measure of government responses to COVID-19 across countries and over time, of which the mean was 71.66 (S.D. = 14.74).

Table 1. Descriptive statistics of variables.

	N	Min	Max	Mean	S.D.
Parental burnout	4587	0	138	27.20	28.27
Lockdown measures	4587	40	94	71.72	14.71
Co-parenting	4587	4	32	17.41	3.45
Age	4587	16	81	40.24	7.96
Gender	4587	0	1	0.26	0.44
Educational level	4587	0	45	16.11	4.08

Wave 2 International Investigation of Parental Burnout, 2020.

A linear regression analyses was conducted to analyse the expected relationship between COVID-19 lockdown measures on parental burnout. The results, Table 2 model 1,

show a significant and positive effect from state-imposed lockdown measures on parental burnout. This indicates that stricter lockdown measures are associated with higher the levels of parental burnout ($B = 0.15$, $p < 0.001$). Thus, the results are in line with our first hypothesis. However, the stringency index in itself only explains 0.6% ($R^2 = 0.006$) of the variance in parental burnout. Thus, it is useful to consider other factors.

Table 2. Stepwise linear regression.

	Model 1		Model 2		Model 3		Model 4		Model 5	
							Fathers		Mothers	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
Constant	16.81 ***	2.07	28.31 ***	3.14	19.63	10.09	−40.58 *	15.80	41.61 **	12.54
Lockdown measures	0.15 ***	0.03	0.18 ***	0.03	0.30	1.38 *	1.09 ***	0.23	−0.01	0.17
Co-parenting			−1.66 ***	0.12	−1.16 *	0.57	2.42 *	0.89	−2.64 ***	0.72
Gender			−7.02 ***	0.92	−6.99 ***	0.92				
Educational level			0.68 ***	0.10	0.68 ***	0.10	0.45 *	0.16	0.77 ***	0.12
Number of children			2.98 ***	0.38	2.97 ***	0.38	2.74 ***	0.59	2.96 ***	0.48
Lockdown*Co-parent					−0.01	0.01	−0.06 ***	0.01	0.01	0.01
R^2	0.006		0.070		0.083		0.070		0.070	

Note: * $p < 0.05$, ** $p < 0.005$, *** $p < 0.001$. Wave 2 International Investigation of Parental Burnout, 2020.

In Table 2 model 2, co-parenting was added to the model. The results show that the higher the level of co-parenting, the lower the level of parental burnout ($B = -1.66$, $p < 0.001$). In addition, we controlled for gender, educational level and number of children. When controlling for those covariates, the effect of lockdown measures increases ($B = 0.18$, $p < 0.001$). This indicates possible suppressor effects. In addition, the results in model 2 show that the covariates, gender, educational level and number of children, have a significant effect on parental burnout: women experience higher levels of parental burnout in comparison to men ($B = -7.02$, $p < 0.001$); higher levels of educational level for parents are associated with higher levels of reported parental burnout ($B = 0.68$, $p < 0.001$); and the more children, the higher the level of parental burnout ($B = 2.98$, $p < 0.001$). Moreover, the second model explains 7.0% ($R^2 = 0.070$) of the variance in parental burnout. To test whether COVID-19 lockdown measures had a significant impact on parental burnout for both mothers and fathers, model 2 was run separately for men and women. The results in Table 3 indicate that lockdown measures significantly increased parental burnout in both fathers and mothers ($B = 0.12$, $p < 0.05$; $B = 0.21$, $p < 0.001$), controlled for co-parenting, educational level, and number of children. In addition, for both fathers and mothers, higher levels of co-parenting were found to be associated with lower levels of parental burnout ($B = -1.36$, $p < 0.001$; $B = -1.74$, $p < 0.001$), controlled for lockdown measures, educational level and number of children.

Table 3. Model 2 for fathers and mothers separately.

	Model 2a		Model 2b	
	Fathers		Mothers	
	B	S.E.	B	S.E.
Constant	24.21 ***	5.07	26.16 ***	3.87
Lockdown measures	0.12 *	0.04	0.21 ***	0.03
Co-parenting	−1.36 ***	0.22	−1.74 ***	0.14
Educational level	0.41 *	0.16	0.79 ***	0.12
Number of children	3.08 ***	0.59	2.91 ***	0.48
R^2	0.06		0.07	

Note: * $p < 0.05$, *** $p < 0.001$. Wave 2 International Investigation of Parental Burnout, 2020.

To test our second hypothesis, we included co-parenting as a possible moderator to our model. The results in Table 2 model 3 show that there is no significant mitigating effect of co-parenting on the relationship between lockdown measures and the level of parental burnout ($B = 0.01, p > 0.05$). This does not confirm the hypothesized relationship, as co-parenting was expected to decrease the association between COVID-19 measures and parental burnout.

Finally, to test our third hypothesis, which indicated that the mitigating effect of co-parenting differs for gender, we ran model 3 separately for fathers and for mothers. The results, displayed in Table 2 models 4 and 5, show that the conditional effect of co-parenting on the relation between COVID-19 lockdown measures and parental burnout is different for men and women. The conditional effect of co-parenting is not significant for mothers ($B = -0.01, p > 0.05$), but it is significant for fathers ($B = -0.06, p < 0.001$). The results indicate that, for men, co-parenting mitigates the effect of COVID-19 lockdown measures on parental burnout. Thus, for fathers, the positive association between state-imposed lockdown measures and parental burnout becomes less strong when co-parenting is involved (e.g., share their investment in the child, evaluate involvement with the child, have respect for each other's judgement about child rearing and communicate child-related information with their partner). Those results are in line with our expectations.

4. Discussion and Conclusions

Recent studies show that experiences of parental burnout increased due to the COVID-19 pandemic, and the lockdown measures that have been taken by the government. Factors that have been shown to increase the risk of parental burnout include having a child with special needs, a lack of stable traits among parents, a deficiency in family functioning, as well as unemployment statuses among parents, financial insecurity, low levels of social support from family and friends, a lack of leisure time (Norberg and Green 2007; Basaran et al. 2013; Mikolajczak et al. 2017; Griffith 2020). As co-parenting is identified as one of the important factors that can decrease the experience of parental burnout, this paper sought to investigate the possible mitigating role of co-parenting in the association between COVID-19 lockdown measures on parental burnout. Studies show that co-parenting is efficient and effective when one wants to improve the family system, and reduces the level of stress among parents (Delvecchio et al. 2015). However, based on theories on social roles (Eagly and Wood 2012), social learning (Bandura 1977), and a delay in the two-fold gender revolution (Goldscheider et al. 2015), differences in gender norms can be expected in parenting roles. Therefore, this paper also examined whether the role of co-parenting differed for men and women in relation to the association between state-imposed lockdown measures and levels of experienced parental burnout.

The results of our analysis are in line with results of previous studies: COVID-19 lockdown measures increase the level of parental burnout among parents. This indicates that the lockdown measures indeed cause extra stress associated to the practice of parenting, and thus increase the level of parental burnout in countries around the globe. While our analyses indicate that higher levels of co-parenting are associated with lower levels of parental burnout, our analyses also show that co-parenting does not mitigate the relationship between state-imposed lockdown measures and experienced levels of parental burnout for the total sample. However, when assessing this relationship separately for men and women, we found that co-parenting does significantly mitigate the relationship between COVID-19 measures and parental burnout for fathers. This was in line with our expectations: co-parenting plays a more crucial role as a resource for a reduction in parental stress for men in comparison to women. This seems to be in line with the idea of the two-fold gender revolution and prevailing norms, where women are often still the primary caregiver, and men have not fully integrated into the unpaid work that needs to be done at home. While women are used to the caregiving responsibilities, these responsibilities have become inescapable for men due to imposed COVID-19 restrictions. Therefore,

co-parenting plays a more crucial role in mitigating the effect of COVID-19 on parental burnout for men in comparison to women.

An important shortcoming of our study is the lack of inclusion of information on both family characteristics and dynamics, as well as more contextual information of countries. With regard to family characteristics and dynamics, no information was included about the quality and specifics of the couple's relationship, the individual characteristics of the children, the functional and economic condition the family found itself in before and after lockdown measures were imposed, and the formal and informal social support surrounding the family before and during this time of crisis. With regard to contextual information, countries from around the globe were assessed simultaneously, without taking into account contextual factors. We are aware of the fact that different family characteristics and dynamics, national contexts and cultures can play an important role in the impact of COVID-19, and individuals' experiences of distress within the home. A direction for future research is therefore to investigate whether the results that were found in this study hold in different family, as well as cultural and national contexts.

Our study confirms that the COVID-19 pandemic is associated with higher levels of parental burnout for both men and women, and that co-parenting can play a crucial role in mitigating this effect. As this mitigating effect was not found to hold for women, more attention needs to be paid to other types of provision of formal and informal support that can help to reduce the impact of COVID-19 on parental burnout for mothers as well. Since there might be another outbreak of the COVID-19 virus, or other crises might occur in the future, the provision of formal social support can be crucial to combat the detrimental effect these adversities have on parents.

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